



FREQUENTLY ASKED QUESTIONS ABOUT DIBROM (NALED)

Q. What is Dibrom?

Dibrom is an insecticide that has been registered by the US Environmental Protection Agency (EPA) since 1959 for use in the United States. It is used primarily for controlling adult mosquitoes. It is also used on food and feed crops, livestock pastures, and in greenhouses for controlling black flies, houseflies, gnats, and certain other nuisance insects. Dibrom is a colorless liquid with a slightly pungent odor. When applied in accordance with the recommended amount and the safety precautions on the label, Dibrom can be used to kill mosquitoes without endangering human health or the environment.

Q. How is Dibrom used in mosquito Control?

In mosquito control programs, Dibrom is usually applied as an ultra-low volume (ULV) spray by truck-mounted or aircraft-mounted sprayers. ULV sprayers dispense very fine aerosol droplets that stay aloft and kill mosquitoes on contact. ULV applications involve small quantities of the pesticide in relation to the size of the area to be treated. Depending upon the commercial formulation, the rate of application for Dibrom in mosquito control ranges between 0.5-1.2 ounces per acre. At this rate, exposure and risks to humans, animals, and the environment are minimal.

Q. What happens to Dibrom when it enters the environment?

Dibrom immediately begins to breakdown upon release of the spray droplets in the open air. Dibrom also breaks down rapidly in water and in sunlight. Microorganisms breakdown most of the Dibrom in soil before it reaches the groundwater. One of the breakdown products of Dibrom is called DDVP, which is very short-lived and does not persist in the environment.

Q. Does Dibrom pose risks to human health?

Dibrom can be used for controlling mosquitoes without endangering human health when applied in the amounts recommended on the label. Since the amount of Dibrom released per acre is very small, human exposures to Dibrom would be several hundreds or thousands of times below an amount that might pose a health concern. Studies conducted in the workplace have not shown any harmful effects to workers who were exposed by breathing low levels of Dibrom.

Ingestion or inhalation of Dibrom, in amounts several times higher than those associated with mosquito control, can cause nausea, dizziness, salivation, headaches, confusion, and blurred vision. Severe high doses may lead to unconsciousness, convulsions, respiratory failure, and death. Direct contact with Dibrom may cause irritation of the eyes and the skin.

Q. Does Dibrom cause cancer, birth defects, or reproductive effects?

Studies in experimental animals have not shown Dibrom to cause cancer, birth defects, or adverse effects on reproduction. It is not known whether Dibrom causes cancer, birth defects, or any adverse effects on reproduction in humans.

Q. Does DDVP (breakdown product of Dibrom) pose risk to human health or the environment?

DDVP in small amounts does not pose any risk to humans. The contribution of DDVP to risks associated with Dibrom spraying would be negligible. DDVP is short-lived and does not persist in the environment.

Q. Does Dibrom pose risks to pets, fish, birds, and livestock?

Dibrom is not harmful to pets, fish, birds, or livestock if used properly in accordance with the label for mosquito control. However, in order to minimize exposure, you may want to keep pets indoors during spraying. You may also want to cover fishponds during spraying to avoid exposure of fish. However, do not leave covers on fishponds long enough to cause oxygen depletion.

Q. Is Dibrom harmful to bees?

Dibrom is an insecticide and is considered to be toxic to bees. Droplets of sprayed Dibrom can kill foraging bees upon contact. Beekeepers can protect their bees by sheltering the hives during the spraying operations.

Q. Is it safe to swim in the swimming pool after spraying?

Since Dibrom breaks down quickly in water and in sunlight, no special precaution or waiting period is recommended. To avoid any potential exposure, you may cover your pool during spraying.

Q. What can I do to reduce exposure to Dibrom?

You can take the following steps to help reduce possible exposure to Dibrom during spraying:

- If you have to be outdoors during spraying, avoid eye contact with the mist or spray. If you get spray in your eyes, immediately rinse with water.
- Wash exposed skin surfaces with soap and water if you come in contact with the mist or spray.
- Wash any exposed fruits and vegetables before storing, cooking, or eating.
- Consult your physician if you have any specific health concerns regarding the spraying.

Q. Where can I get more information?

For more information, contact the Virginia Department of Health, Division of Health Hazards Control, 1500 East Main Street, Richmond, VA 23219. Phone: (804)786-1763.

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